STATUS OF CLAIMS

1. (Original) An optical scanner for reading an optical code having a two-dimensional pattern of different light reflectivity, comprising:

light source for producing a light beam; and

a raster scanning assembly for receiving the light beam and producing an outgoing light beam having a two-dimensional scanning pattern,

the raster scanning assembly comprising optical elements shaped and positioned so that the two-dimensional scanning pattern produces at least one region of apparent greater brightness on the indicia,

wherein the region of apparent greater brightness has a shape and orientation suitable for assisting in alignment of two-dimensional scanning pattern of the outgoing light beam with the two-dimensional pattern of the optical code.

2. (Original) The optical scanner of claim 1 wherein the region of apparent greater brightness is a region in which the density of scan lines in the two-dimensional scanning pattern is greater than in other regions.

3. (Original) The optical scanner of claim 1 wherein the region of apparent greater brightness is a region in which the scanning spot of the outgoing light beam is shaped differently from the shape in other regions.

4. (Original) The optical scanner of claim 1 wherein the region of apparent greater brightness is a region in which the density of scan lines in the two-dimensional scanning pattern is greater than in other regions and the scanning spot of the outgoing light beam is shaped differently from the shape in other regions.

5. (Original) The optical scanner of claim 2 wherein the two-dimensional scanning assembly produces a plurality of generally spaced apart, parallel scan lines that produce a raster-scanned pattern of scan lines on the indicia,

wherein the raster scanning assembly comprises a multi-surface reflector having at least first and second surfaces, the first surface producing first scan lines on the indicia, and the second surface producing second scan lines on the indicia,

wherein the first and second surfaces are differently shaped and positioned relative to one another so that first scan lines overlap some of the second scan lines, to produce a region of overlapping scan lines on the indicia, and

wherein the region of overlapping scan lines produces the region of apparent greater brightness.

6. (Original) The optical scanner of claim 3 wherein the two-dimensional scanning assembly produces a plurality of generally spaced apart, parallel scan lines that produce a raster-scanned pattern of scan lines on the indicia,

wherein the raster scanning assembly comprises a multi-surface reflector having at least first and second surfaces, the first surface producing first scan lines on the indicia, and the second surface producing second scan lines on the indica,

wherein first and second surfaces are differently shaped and positioned relative to one another so that the spot of the first scan lines is shaped differently from the spot of the second scan lines, and,

wherein the difference in spot shaped produces the region of apparent greater brightness.

7. (Original) The optical scanner of claim 4 wherein the two-dimensional scanning assembly produces a plurality of generally spaced apart, parallel scan lines that produce a raster-scanned pattern of scan lines on the indicia,

wherein the raster scanning assembly comprises a multi-surface reflector having surfaces on the reflector that are differently shaped and positioned relative to one another so that scan lines overlap other scan lines, to produce a region of overlapping scan lines on the indicia, and so that the scanning spot is shaped differently for at least some of the scan lines in the region of overlapping scan lines, and

wherein the overlapping scan lines and the difference in spot shape produce the region of apparent greater brightness.

8. (Original) The optical scanner of claim 3, 4, 6, or 7 wherein the different in spot shape is an enlargement of the area of the spot at the indicia.

9. (Original) The optical scanner of claim 3, 4, 6, or 7 wherein the different in spot shape is an elongation of the spot at the indicia.

10. (Original) The optical scanner of claim 1, 5, 6 or 7 wherein the optical code comprises rows of optically coded elements, and wherein the region of apparent greater brightness is an elongated region that is aligned parallel with the rows of optically coded elements in the optical code.

11. (Original) The optical scanner of claim 10 wherein there are less bright regions above and below the region of apparent greater brightness.

12. (Original) The optical scanner of claim 5 wherein the first and second surfaces are inclined relative to one another.

13. (Original) The optical scanner of claim 12 wherein the first and second surfaces are planar.

14. (Original) The optical scanner of claim 12 wherein at least one of the first and second surfaces is curved.

15. (Original) The optical scanner of claim 6 or 7 wherein the difference in spot shape is produced by at least one curved projection on the surface of the reflector.

16. (Original) The optical scanner of claim 15 wherein there is a curved projection at approximately the center of the reflector, and the curved projection has the effect of producing a centrally located region of apparent greater brightness.

17. (Original) The optical scanner of claim 15 wherein there are at least two curved projections, one at approximately each end of the reflector surface.

18. (Original) The optical scanner of claim 7 wherein the surfaces on the reflector include first and second surfaces inclined relative to one another along a boundary, and a third surface comprising a curved projection located at the boundary.

19. (Previously Presented) The optical scanner of claim 5, 6 or 7 wherein the reflector rotates about a first axis to produce movement of the scanning spot along a first direction, and wherein the scanning assembly includes a second reflector that rotates about a second axis to produce movement of the scanning spot in a second direction.

20. (Original) The optical scanner of claim 19 wherein the first and second directions of movement of the scanning spot are generally orthogonal.

21. (Original) The optical scanner of claim 8 wherein the difference in the spot shape is produced by at least one curved projection on the surface of the reflector.

22. (Original) The optical scanner of claim 9 wherein the difference in spot shape is produced by at least one curved projection on the surface of the refectory.

23. (New) An optical scanner for reading an optical code having a two-dimensional pattern of different light reflectivity, comprising:

light source for producing a light beam; and

a raster scanning assembly for receiving the light beam and producing an outgoing light beam having a two-dimensional scanning pattern,

the raster scanning assembly comprising optical elements shaped and positioned to produce a two-dimensional scanning pattern having at least one region of apparent greater brightness generally centralized within the scanning pattern when projected onto an indicia,

wherein the region of apparent greater brightness has a shape and orientation suitable for assisting in alignment of two-dimensional scanning pattern of the outgoing light beam with the two-dimensional pattern of the optical code.

24. (New) An optical scanner for reading an optical code having a two-dimensional pattern of different light reflectivity, comprising:

light source for producing a light beam; and

a raster scanning assembly for receiving the light beam and producing an outgoing light beam having a two-dimensional scanning pattern,

the raster scanning assembly comprising optical elements shaped and positioned so that the two-dimensional scanning pattern produces at least one region of apparent greater brightness on the indicia wherein the region of apparent greater brightness is a region in which the scanning spot of the outgoing light beam is shaped differently from the shape in other regions,

wherein the region of apparent greater brightness has a shape and orientation suitable for assisting in alignment of two-dimensional scanning pattern of the outgoing light beam with the two-dimensional pattern of the optical code.

25. (New) The optical scanner of claim 24 wherein there are less bright regions above and below the region of apparent greater brightness.

26. (New) The optical scanner of claim 24 wherein the region of apparent greater brightness is a region in which the scanning spot of the outgoing light beam is shaped differently from the shape in other regions.

27. (New) The optical scanner of claim 24 wherein the region of apparent greater brightness is a region in which the density of scan lines in the two-dimensional scanning pattern is greater than in other regions and the scanning spot of the outgoing light beam is shaped differently from the shape in other regions.

28. (New) The optical scanner of claim 24 wherein the two-dimensional scanning assembly produces a plurality of generally spaced apart, parallel scan lines that produce a raster-scanned pattern of scan lines on the indicia,

wherein the raster scanning assembly comprises a multi-surface reflector having at least first and second surfaces, the first surface producing first scan lines on the indicia, and the second surface producing second scan lines on the indicia,

wherein the first and second surfaces are differently shaped and positioned relative to one another so that first scan lines overlap some of the second scan lines, to produce a region of overlapping scan lines on the indicia, and

wherein the region of overlapping scan lines produces the region of apparent greater brightness.

29. (New) The optical scanner of claim 26 wherein the two-dimensional scanning assembly produces a plurality of generally spaced apart, parallel scan lines that produce a raster-scanned pattern of scan lines on the indicia,

wherein the raster scanning assembly comprises a multi-surface reflector having at least first and second surfaces, the first surface producing first scan lines on the indicia, and the second surface producing second scan lines on the indica,

wherein first and second surfaces are differently shaped and positioned relative to one another so that the spot of the first scan lines is shaped differently from the spot of the second scan lines, and,

wherein the difference in spot shaped produces the region of apparent greater brightness.

30. (New) The optical scanner of claim 27 wherein the two-dimensional scanning assembly produces a plurality of generally spaced apart, parallel scan lines that produce a raster-scanned pattern of scan lines on the indicia,

wherein the raster scanning assembly comprises a multi-surface reflector having surfaces on the reflector that are differently shaped and positioned relative to one another so that scan lines overlap other scan lines, to produce a region of overlapping scan lines on the indicia, and so that the scanning spot is shaped differently for at least some of the scan lines in the region of overlapping scan lines, and

wherein the overlapping scan lines and the difference in spot shape produce the region of apparent greater brightness.

31. (New) The optical scanner of claim 26 wherein the different in spot shape is an enlargement of the area of the spot at the indicia.

32. (New) The optical scanner of claim 26 wherein the different in spot shape is an elongation of the spot at the indicia.

33. (New) The optical scanner of claim 24 wherein the optical code comprises rows of optically coded elements, and wherein the region of apparent greater brightness is an elongated region that is aligned parallel with the rows of optically coded elements in the optical code.

34. (New) The optical scanner of claim 28 wherein the first and second surfaces are inclined relative to one another.

35. (New) The optical scanner of claim 34 wherein the first and second surfaces are planar.

36. (New) The optical scanner of claim 34 wherein at least one of the first and second surfaces is curved.

37. (New) The optical scanner of claim 29 wherein the difference in spot shape is produced by at least one curved projection on the surface of the reflector.

38. (New) The optical scanner of claim 37 wherein there is a curved projection at approximately the center of the reflector, and the curved projection has the effect of producing a centrally located region of apparent greater brightness.

39. (New) The optical scanner of claim 37 wherein there are at least two curved projections, one at approximately each end of the reflector surface.

40. (New) The optical scanner of claim 30 wherein the surfaces on the reflector include first and second surfaces inclined relative to one another along a boundary, and a third surface comprising a curved projection located at the boundary.

41. (New) The optical scanner of claim 28 wherein the reflector rotates about a first axis to produce movement of the scanning spot along a first direction, and wherein the scanning assembly includes a second reflector that rotates about a second axis to produce movement of the scanning spot in a second direction.

42. (New) The optical scanner of claim 41 wherein the first and second directions of movement of the scanning spot are generally orthogonal.

43. (New) The optical scanner of claim 31 wherein the difference in the spot shape is produced by at least one curved projection on the surface of the reflector.

44. (New) The optical scanner of claim 32 wherein the difference in spot shape is produced by at least one curved projection on the surface of the refectory.